# Figure 1

Human Nrg-ICD Polypeptide Sequence
SEQ                              ID                              NO:                              1
KTKKQRKKLHDRLRQSLRSERNNVMNMANGPHHPNPPPDNVQLVNQYVSKNIIS
SERVVERETETSFSTSHYTSTTHHSMTVTQTPSHSWSNGHTESILSESHSVLVSSSV
ENSRHTSPTGPRGRLNGIGGPREGNSFLRHARETPDSYRDSPH
SERYVSAMTTPARMSPVDFHTPTSPKSPPSEMSPPVSSLTISIPSVAVSPFMDEERP
LLLVTPPRLREKYDNHLQQFNSFHNNPTHESNSLPPSPLRIVEDEEYETTQEYEPA
QEPPKKLTNSRRVKRTKPNGHISSRVEVDSDTSSQSTSSESETEDERTGEDTPFLSI
QNPMATSLEPAAAYRLAENRTNPANRFSTPEELQARLSSVIANQDPIAV

# Figure 2

/gene="Nrg1"

/note="IG; Region: Immunoglobulin"

/db_xref="CDD:smart00409"

misc_feature    1038..2222

/gene="Nrg1"

/note="Neuregulin; Region: Neuregulin family"

/db_xref="CDD:pfam02158"

BASE COUNT     900 a    867 c    743 g    762 t

ORIGIN

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  61 gggctgtaag agagcgagac aagccaccga agcgaggcca ctccagagcc ggcagcggag
 121 ggacccggga cactagagca gctccgagcc actccagact gagcggacgc tccaggtgat
 181 cgagtccacg ctgcttcctg caggcgacag gcgacgcctc ccgagcagcc cggccactgg
 241 ctcttcccct cctgggacaa acttttctgc aagcccttgg accaaacttg tcgcgcgtca
 301 ccgtcaccca accgggtccg cgtagagcgc tcatcttcgg cgagatgtct gagcgcaaag
 361 aaggcagagg caaggggaag ggcaagaaga aggaccgggg atcccgcggg aagcccgggc
 421 ccgccgaggg cgacccgagc ccagcactgc ctcccagatt gaaagaaatg aagagccagg
 481 agtcagctgc aggctccaag ctagtgctcc ggtgcgaaac cagctccgag tactcctcac
 541 tcagattcaa atggttcaag aatgggaacg agctgaaccg caaaaataaa ccagaaaaca
 601 tcaagataca gaagaagcca gggaagtcag agcttcgaat taacaaagca tccctggctg
 661 actctggaga gtatatgtgc aaagtgatca gcaagttagg aaatgacagt gcctctgcca
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 781 cctatgtgtc ctcagagtct cccattagaa tctcagtttc aacagaaggc gcaaacactt
 841 cttcatccac atcaacatcc acgactggga ccagccatct cataaagtgt gcggagaagg
 901 agaaaacttt ctgtgtgaat ggggggcgagt gcttcacggt gaaggacctg tcaaacccgt
 961 caagatactt gtgcaagtgc ccaaatgagt ttactggtga tcgttgccaa aactacgtaa
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1201 tggtgaacat agcgaatggg cctcaccacc aaaacccacc gccagagaac gtgcagctgg
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1621 ccccggctcg tatgtcacct gtagatttcc acacgccaag ctcccctaaa tcgccccctt
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1741 cctttgtgga agaagagagg cctctgctgc ttgtgacgcc accaaggcta cgggagaaga
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1981 ccaagcccaa tggccacatt gccataggt tggaaatgga cagcaacaca agttctgtga
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3241 accaaccaac cacaggtgcc tctgctccct gt
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# Figure 3

Nuclear localization sequences

SEQ ID NO: 3          KTKKQRKK

SEQ ID NO: 4          PRLREKK

# Figure 4

Binding sites in Nrg-ICD for Eos

SEQ ID NO: 5          KTKKQRKKLH          DRLRQSLRSE          RNNVMNMANG
PHHPNPPPDN VQLVNQYV

SEQ ID NO: 6
      SERYVSAMTTPARMSPVDFHTPTSPKSPPSEMSPPVSSLTISIPSVAVSPFM
DEERPLLLVTPPRLREKYDNHLQQFNSFHNNPTHESNSLPPSPLRIVEDEEYETTQ
EYEPAQEPPKKLTNSRRVKRTKPNGHISSRVEVDSDTSSQSTSSESETEDERTGED
TPFLSIQNPMATSLEPAAAYRLAENRTNPANRFSTPEELQARLSSVIANQDPIAV

# Figure 5

Human Eos binding domain for DNA

SEQ ID NO: 7

LKCDVCGMVCIGPNVLMVHKRSHTGERPFHCNQCGASFTQKGNLLR
HIKLHSGEKPFKCPFCNYACRRRDALTGHLRTHSVSSPTVGKPYKCNY
CGRSYKQQSTLEEHKERCHNYL

# Figure 6

Human Eos binding domain for Nrg-ICD

SEQ ID NO: 8

CEHCRILFLDHVMFTIHMGCHGFRDPFECNICGYHSQDRYEFSSHIVRG
EHKVG

# Figure 7

Peptides that block Nrg-ICD/Eos signaling

SEQ ID NO: 9        YGRKKRRQRRR
CEHCRILFLDHVMFTIHMGCHGFRDPFECNICGYHSQDRYEFSSHIVRGEHKVG

SEQ ID NO: 10        RQIKIWFQNRRMKWKK
CEHCRILFLDHVMFTIHMGCHGFRDPFECNICGYHSQDRYEFSSHIVRGEHKVG

SEQ ID NO: 11        DAATATRGRSAASRPTERPRAPARSASRPRRPVE
CEHCRILFLDHVMFTIHMGCHGFRDPFECNICGYHSQDRYEFSSHIVRGEHKVG